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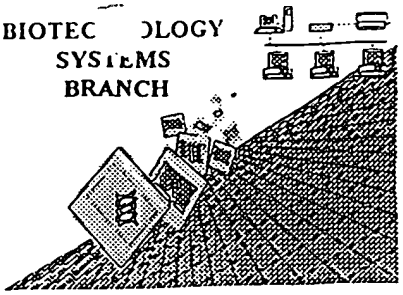

0590
10/05

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/892,864

Source: OIPE

Date Processed by STIC: 7/12/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
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OIPE

RAW SEQUENCE LISTING DATE: 07/12/2001
PATENT APPLICATION: US/09/892,864 TIME: 09:44:33

Input Set : A:\209524US0CONT.txt
Output Set: N:\CRF3\07122001\I892864.raw

```
     3 <110> APPLICANT: YOKOYAMA, Keiichi
     4       ONO, Kunio
     5       EJIMA, Daisuke
     7 <120> TITLE OF INVENTION: PROCESS FOR PRODUCING TRANSGLUTAMINASE
     9 <130> FILE REFERENCE: 209524US0CONT
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/892,864
C--> 11 <141> CURRENT FILING DATE: 2001-06-28
    11 <150> PRIOR APPLICATION NUMBER: PCT/JP99/07250
    12 <151> PRIOR FILING DATE: 1999-12-24
    14 <150> PRIOR APPLICATION NUMBER: JP 10-373131
    15 <151> PRIOR FILING DATE: 1998-12-28
    17 <160> NUMBER OF SEQ ID NOS: 58
    19 <170> SOFTWARE: PatentIn version 3.1
    21 <210> SEQ ID NO: 1
    22 <211> LENGTH: 1519
    23 <212> TYPE: DNA
    24 <213> ORGANISM: Artificial Sequence
    26 <220> FEATURE:
    27 <223> OTHER INFORMATION: Synthetic DNA
    29 <220> FEATURE:
    30 <221> NAME/KEY: CDS
    31 <222> LOCATION: (87)..(1082)
    32 <223> OTHER INFORMATION:
    35 <400> SEQUENCE: 1
    36 ttcccctgtt gacaattaat catcgaacta gttaactagt acgcaagttc acgtaaaaag     60
    38 ggtatcgatt agtaaggagg tttaaa atg gat tct gac gat cgt gtt act cca     113
    39                              Met Asp Ser Asp Asp Arg Val Thr Pro
    40                              1               5
    42 cca gct gaa cca ctg gat cgt atg cca gat cca tat cgt cca tct tat     161
    43 Pro Ala Glu Pro Leu Asp Arg Met Pro Asp Pro Tyr Arg Pro Ser Tyr
    44 10                  15                  20                  25
    46 ggt cgt gct gaa act gtt gtt aat aat tat att cgt aaa tgg caa caa     209
    47 Gly Arg Ala Glu Thr Val Val Asn Asn Tyr Ile Arg Lys Trp Gln Gln
    48                  30                  35                  40
    50 gtt tat tct cat cgt gat ggt cgt aaa caa caa atg act gaa gaa caa     257
    51 Val Tyr Ser His Arg Asp Gly Arg Lys Gln Gln Met Thr Glu Glu Gln
    52              45                  50                  55
    54 cgt gaa tgg ctg tct tat ggt tgc gtt ggt gtt act tgg gtt aac tct     305
    55 Arg Glu Trp Leu Ser Tyr Gly Cys Val Gly Val Thr Trp Val Asn Ser
    56          60                  65                  70
    58 ggt cag tat ccg act aac cgt ctg gca ttc gct tcc ttc gat gaa gat     353
    59 Gly Gln Tyr Pro Thr Asn Arg Leu Ala Phe Ala Ser Phe Asp Glu Asp
    60      75                  80                  85
    62 cgt ttc aag aac gaa ctg aag aac ggt cgt ccg cgt tct ggt gaa act     401
    63 Arg Phe Lys Asn Glu Leu Lys Asn Gly Arg Pro Arg Ser Gly Glu Thr
    64 90                  95                  100                 105
    66 cgt gct gaa ttc gaa ggt cgt gtt gct aag gaa tcc ttc gat gaa gag     449
```

Does Not Comply
Corrected Diskette Needed

RAW SEQUENCE LISTING DATE: 07/12/2001
PATENT APPLICATION: US/09/892,864 TIME: 09:44:33

Input Set : A:\209524US0CONT.txt
Output Set: N:\CRF3\07122001\I892864.raw

```
67 Arg Ala Glu Phe Glu Gly Arg Val Ala Lys Glu Ser Phe Asp Glu Glu
68                 110                 115                 120
70 aaa ggc ttc cag cgt gct cgt gaa gtt gct tct gtt atg aac cgt gct      497
71 Lys Gly Phe Gln Arg Ala Arg Glu Val Ala Ser Val Met Asn Arg Ala
72             125                 130                 135
74 cta gag aac gct cat gat gaa tct gct tac ctg gat aac ctg aag aag      545
75 Leu Glu Asn Ala His Asp Glu Ser Ala Tyr Leu Asp Asn Leu Lys Lys
76         140                 145                 150
78 gaa ctg gct aac ggt aac gat gct ctg cgt aac gaa gat gct cgt tct      593
79 Glu Leu Ala Asn Gly Asn Asp Ala Leu Arg Asn Glu Asp Ala Arg Ser
80     155                 160                 165
82 ccg ttc tac tct gct ctg cgt aac act ccg tcc ttc aaa gaa cgt aac      641
83 Pro Phe Tyr Ser Ala Leu Arg Asn Thr Pro Ser Phe Lys Glu Arg Asn
84 170                 175                 180                 185
86 ggt ggt aac cat gat ccg tct cgt atg aaa gct gtt atc tac tct aaa      689
87 Gly Gly Asn His Asp Pro Ser Arg Met Lys Ala Val Ile Tyr Ser Lys
88                 190                 195                 200
90 cat ttc tgg tct ggt cag gat aga tct tct tct gct gat aaa cgt aaa      737
91 His Phe Trp Ser Gly Gln Asp Arg Ser Ser Ser Ala Asp Lys Arg Lys
92             205                 210                 215
94 tac ggt gat ccg gat gca ttc cgt ccg gct ccg ggt act ggt ctg gta      785
95 Tyr Gly Asp Pro Asp Ala Phe Arg Pro Ala Pro Gly Thr Gly Leu Val
96         220                 225                 230
98 gac atg tct cgt gat cgt aac atc ccg cgt tct ccg act tct ccg ggt      833
99 Asp Met Ser Arg Asp Arg Asn Ile Pro Arg Ser Pro Thr Ser Pro Gly
100     235                 240                 245
102 gaa ggc ttc gtt aac ttc gat tac ggt tgg ttc ggt gct cag act gaa      881
103 Glu Gly Phe Val Asn Phe Asp Tyr Gly Trp Phe Gly Ala Gln Thr Glu
104 250                 255                 260                 265
106 gct gat gct gat aag act gta tgg acc cat ggt aac cat tac cat gct      929
107 Ala Asp Ala Asp Lys Thr Val Trp Thr His Gly Asn His Tyr His Ala
108                 270                 275                 280
110 ccg aac ggt tct ctg ggt gct atg cat gta tac gaa tct aaa ttc cgt      977
111 Pro Asn Gly Ser Leu Gly Ala Met His Val Tyr Glu Ser Lys Phe Arg
112             285                 290                 295
114 aac tgg tct gaa ggt tac tct gac ttc gat cgt ggt gct tac gtt atc     1025
115 Asn Trp Ser Glu Gly Tyr Ser Asp Phe Asp Arg Gly Ala Tyr Val Ile
116         300                 305                 310
118 acc ttc att ccg aaa tct tgg aac act gct ccg gac aaa gtt aaa cag     1073
119 Thr Phe Ile Pro Lys Ser Trp Asn Thr Ala Pro Asp Lys Val Lys Gln
120     315                 320                 325
122 ggt tgg ccg taatgaaagc ttggatctct aattactgga cttcacacag             1122
123 Gly Trp Pro
124 330
126 actaaaatag acatatctta tattatgtga ttttgtgaca tttcctagat gtgaggtgga   1182
128 ggtgatgtat aaggtagatg atgatcctct acgccggacg catcgtggcc ggcatcaccg   1242
130 gcgccacagg tgcggttgct ggcgcctata tcgccgacat caccgatggg gaagatcggg   1302
132 ctcgccactt cgggctcatg agcgcttgtt tcggcgtggg tatggtggca ggccccgtgg   1362
134 ccgggggact gttgggcgcc atctccttgc atgcaccatt ccttgcggcg gcggtgctca   1422
```

RAW SEQUENCE LISTING DATE: 07/12/2001
PATENT APPLICATION: **US/09/892,864** TIME: 09:44:33

Input Set : **A:\209524US0CONT.txt**
Output Set: **N:\CRF3\07122001\I892864.raw**

```
136 acggcctcaa cctactactg ggctgcttcc taatgcagga gtcgcataag ggagagcgtc   1482
138 gagagcccgc ctaatgagcg ggctttttt tcagctg                            1519
141 <210> SEQ ID NO: 2
142 <211> LENGTH: 332
143 <212> TYPE: PRT
144 <213> ORGANISM: Artificial Sequence
146 <220> FEATURE:
147 <223> OTHER INFORMATION: Synthetic DNA
149 <400> SEQUENCE: 2
151 Met Asp Ser Asp Asp Arg Val Thr Pro Pro Ala Glu Pro Leu Asp Arg
152 1               5                  10                  15
155 Met Pro Asp Pro Tyr Arg Pro Ser Tyr Gly Arg Ala Glu Thr Val Val
156             20                  25                  30
159 Asn Asn Tyr Ile Arg Lys Trp Gln Gln Val Tyr Ser His Arg Asp Gly
160         35                  40                  45
163 Arg Lys Gln Gln Met Thr Glu Glu Gln Arg Glu Trp Leu Ser Tyr Gly
164     50                  55                  60
167 Cys Val Gly Val Thr Trp Val Asn Ser Gly Gln Tyr Pro Thr Asn Arg
168 65                  70                  75                  80
171 Leu Ala Phe Ala Ser Phe Asp Glu Asp Arg Phe Lys Asn Glu Leu Lys
172                 85                  90                  95
175 Asn Gly Arg Pro Arg Ser Gly Glu Thr Arg Ala Glu Phe Glu Gly Arg
176             100                 105                 110
179 Val Ala Lys Glu Ser Phe Asp Glu Glu Lys Gly Phe Gln Arg Ala Arg
180         115                 120                 125
183 Glu Val Ala Ser Val Met Asn Arg Ala Leu Glu Asn Ala His Asp Glu
184     130                 135                 140
187 Ser Ala Tyr Leu Asp Asn Leu Lys Lys Glu Leu Ala Asn Gly Asn Asp
188 145                 150                 155                 160
191 Ala Leu Arg Asn Glu Asp Ala Arg Ser Pro Phe Tyr Ser Ala Leu Arg
192                 165                 170                 175
195 Asn Thr Pro Ser Phe Lys Glu Arg Asn Gly Gly Asn His Asp Pro Ser
196             180                 185                 190
199 Arg Met Lys Ala Val Ile Tyr Ser Lys His Phe Trp Ser Gly Gln Asp
200         195                 200                 205
203 Arg Ser Ser Ser Ala Asp Lys Arg Lys Tyr Gly Asp Pro Asp Ala Phe
204     210                 215                 220
207 Arg Pro Ala Pro Gly Thr Gly Leu Val Asp Met Ser Arg Asp Arg Asn
208 225                 230                 235                 240
211 Ile Pro Arg Ser Pro Thr Ser Pro Gly Glu Gly Phe Val Asn Phe Asp
212                 245                 250                 255
215 Tyr Gly Trp Phe Gly Ala Gln Thr Glu Ala Asp Ala Asp Lys Thr Val
216             260                 265                 270
219 Trp Thr His Gly Asn His Tyr His Ala Pro Asn Gly Ser Leu Gly Ala
220         275                 280                 285
223 Met His Val Tyr Glu Ser Lys Phe Arg Asn Trp Ser Glu Gly Tyr Ser
224     290                 295                 300
227 Asp Phe Asp Arg Gly Ala Tyr Val Ile Thr Phe Ile Pro Lys Ser Trp
228 305                 310                 315                 320
```

this is Not a DNA sequence.

RAW SEQUENCE LISTING DATE: 07/12/2001
PATENT APPLICATION: US/09/892,864 TIME: 09:44:33

Input Set : A:\209524US0CONT.txt
Output Set: N:\CRF3\07122001\I892864.raw

231 Asn Thr Ala Pro Asp Lys Val Lys Gln Gly Trp Pro
232 325 330
235 <210> SEQ ID NO: 3
236 <211> LENGTH: 39
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Synthetic DNA
243 <400> SEQUENCE: 3
244 aattcatcga ttagtaagga ggtttaaaat ggattctga 39
247 <210> SEQ ID NO: 4
248 <211> LENGTH: 41
249 <212> TYPE: DNA
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Synthetic DNA
255 <400> SEQUENCE: 4
256 cgatcgtcag aatccatttt aaacctcctt actaatcgat g 41
259 <210> SEQ ID NO: 5
260 <211> LENGTH: 41
261 <212> TYPE: DNA
262 <213> ORGANISM: Artificial Sequence
264 <220> FEATURE:
265 <223> OTHER INFORMATION: Synthetic DNA
267 <400> SEQUENCE: 5
268 cgatcgtgtt actccaccag ctgaaccact ggatcgtatg c 41
271 <210> SEQ ID NO: 6
272 <211> LENGTH: 41
273 <212> TYPE: DNA
274 <213> ORGANISM: Artificial Sequence
276 <220> FEATURE:
277 <223> OTHER INFORMATION: Synthetic DNA
279 <400> SEQUENCE: 6
280 gatctggcat acgatccagt ggttcagctg gtggagtaac a 41
283 <210> SEQ ID NO: 7
284 <211> LENGTH: 41
285 <212> TYPE: DNA
286 <213> ORGANISM: Artificial Sequence
288 <220> FEATURE:
289 <223> OTHER INFORMATION: Synthetic DNA
291 <400> SEQUENCE: 7
292 cagatccata tcgtccatct tatggtcgtg ctgaaactgt t 41
295 <210> SEQ ID NO: 8
296 <211> LENGTH: 41
297 <212> TYPE: DNA
298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Synthetic DNA
303 <400> SEQUENCE: 8

RAW SEQUENCE LISTING DATE: 07/12/2001
PATENT APPLICATION: US/09/892,864 TIME: 09:44:33

Input Set : A:\209524US0CONT.txt
Output Set: N:\CRF3\07122001\I892864.raw

304 attaacaaca gtttcagcac gaccataaga tggacgatat g 41
307 <210> SEQ ID NO: 9
308 <211> LENGTH: 41
309 <212> TYPE: DNA
310 <213> ORGANISM: Artificial Sequence
312 <220> FEATURE:
313 <223> OTHER INFORMATION: Synthetic DNA
315 <400> SEQUENCE: 9
316 gttaataatt atattcgtaa atggcaacaa gtttattctc a 41
319 <210> SEQ ID NO: 10
320 <211> LENGTH: 41
321 <212> TYPE: DNA
322 <213> ORGANISM: Artificial Sequence
324 <220> FEATURE:
325 <223> OTHER INFORMATION: Synthetic DNA
327 <400> SEQUENCE: 10
328 tcacgatgag aataaacttg ttgccattta cgaatataat t 41
331 <210> SEQ ID NO: 11
332 <211> LENGTH: 41
333 <212> TYPE: DNA
334 <213> ORGANISM: Artificial Sequence
336 <220> FEATURE:
337 <223> OTHER INFORMATION: Synthetic DNA
339 <400> SEQUENCE: 11
340 tcgtgatggt cgtaaacaac aaatgactga agaacaacgt g 41
343 <210> SEQ ID NO: 12
344 <211> LENGTH: 41
345 <212> TYPE: DNA
346 <213> ORGANISM: Artificial Sequence
348 <220> FEATURE:
349 <223> OTHER INFORMATION: Synthetic DNA
351 <400> SEQUENCE: 12
352 gccattcacg ttgttcttca gtcatttgtt gtttacgacc a 41
355 <210> SEQ ID NO: 13
356 <211> LENGTH: 42
357 <212> TYPE: DNA
358 <213> ORGANISM: Artificial Sequence
360 <220> FEATURE:
361 <223> OTHER INFORMATION: Synthetic DNA
363 <400> SEQUENCE: 13
364 aatggctgtc ttatggttgc gttggtgtta cttgggttaa ca 42
367 <210> SEQ ID NO: 14
368 <211> LENGTH: 40
369 <212> TYPE: DNA
370 <213> ORGANISM: Artificial Sequence
372 <220> FEATURE:
373 <223> OTHER INFORMATION: Synthetic DNA
375 <400> SEQUENCE: 14
376 agcttgttaa cccaagtaac accaacgcaa ccataagaca 40

VERIFICATION SUMMARY DATE: 07/12/2001
PATENT APPLICATION: **US/09/892,864** TIME: 09:44:34

Input Set : **A:\209524US0CONT.txt**
Output Set: **N:\CRF3\07122001\I892864.raw**

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date